



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

September 16, 2016

Mr. Buck Elliott
Operations Manager, Seacoast Terminals
Sprague Operating Resources, LLC
194 Shattuck Way
Newington, NH 03801

RE: On-Site Full Compliance Evaluation Report

Dear Mr. Elliott:

The New Hampshire Department of Environmental Services, Air Resources Division (NHDES) has completed a Full Compliance Evaluation of the Sprague Operating facility at 194 Shattuck Way in Newington, New Hampshire (Sprague). The purpose of the evaluation was to determine compliance with your current air permit and the N.H. Administrative Rules, Env-A 100 *et seq.* An on-site inspection was included in the evaluation and was completed September 1, 2016. This is a copy of the On-Site Full Compliance Evaluation Report for your review and records.

DES did not identify any deficiencies during this compliance evaluation.

If you have any questions, please do not hesitate to give me a call at (603) 271-1987 or by email at Edward.PedutoJr@des.nh.gov.

Sincerely,

Edward F. Peduto, Jr.
Senior Compliance Assessment Engineer
Air Resources Division

cc: Town Administrator, Town of Newington, 205 Nimble Hill Road, Newington, NH 03801

www.des.nh.gov

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Avery Lane Tank Data 2016

Tank No.	Product Stored	Typical Quantity Stored (bbls)	Year Installed	Tank Type	Max Safe-Fill Capacity (bbls)	Max Shell Capacity (bbls)	Failure / Cause	Tank Diameter (ft.)	Tank Height (ft.)
1	Asphalt	60,000	1965	Vertical Fixed Roof - Welded Steel	90,593	92,605	N/A	120	48
2	Asphalt	60,000	1965	Vertical Fixed Roof - Welded Steel	88,307	90,307	N/A	120	48
3	Asphalt	17,000	1965	Vertical Fixed Roof - Welded Steel	23,364	25,305	N/A	67	40
4	Asphalt	100,000	1972	Vertical Fixed Roof - Welded Steel	146,117	149,535	N/A	150	48
5	Asphalt	95,000	1972	Vertical Fixed Roof - Welded Steel	136,774	139,928	N/A	150	48
6	Aviation Gas	3,000	1979	Vertical Floating Roof - Welded Steel	4,315	4,564	N/A	28	48
7	Asphalt	5,000	1981	Vertical Fixed Roof - Welded Steel	6,670	7,434	N/A	40	30
8	Asphalt	30,000	1981	Vertical Fixed Roof - Welded Steel	40,611	42,408	N/A	77	51
9	Asphalt	30,000	1981	Vertical Fixed Roof - Welded Steel	41,057	42,925	N/A	80	48
10	Asphalt	10,000	1981	Vertical Fixed Roof - Welded Steel	14,059	14,973	N/A	54	40
11	OOS	10,000	1981	Vertical Fixed Roof - Welded Steel	13,562	14,324	N/A	54	40
12	Asphalt	18,000	1982	Vertical Fixed Roof - Welded Steel	21,949	25,412	N/A	69	40
14	Asphalt	40,000		Vertical Fixed Roof - Welded Steel	66,855	69,217	N/A	120	36
B-1	No. 2 Fuel Oil	300	1965	Vertical Fixed Roof - Welded Steel	387	430	N/A	10.42	27
A	No. 2 Fuel Oil	300	1989	Vertical Fixed Roof - Welded Steel	397	714	N/A	10.42	27
B	Asphalt Additive	300	1989	Vertical Fixed Roof - Welded Steel	401	714	N/A	10.42	27
SE-1	Inactive	100	1997	Horizontal - Cradled	177	191	N/A		

Abbreviations and Acronyms

AAL	Ambient Air Limit
acf	actual cubic foot
ags	above ground surface
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAS	Chemical Abstracts Service
CI	Compression Ignition
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CPMS	Continuous Parameter Monitoring System
DER	Discrete Emission Reduction
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division
ERC	Emission Reduction Credit
ft	foot or feet
ft ³	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant
hp	horsepower
hr	hour
kW	kilowatt
lb	pound
LPG	Liquified Petroleum Gas
MM	million
MSDS	Material Safety Data Sheet
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NG	Natural Gas
NHDES	New Hampshire Department of Environmental Services
NOx	Oxides of Nitrogen
NSCR	Non-Selective Catalytic Reduction
NSPS	New Source Performance Standard
OOS	Out of Service
PM ₁₀	Particulate Matter < 10 microns
ppm	parts per million
psi	pounds per square inch
RACT	Reasonably Available Control Technology
RICE	Reciprocating Internal Combustion Engine
RSA	Revised Statutes Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SO ₂	Sulfur Dioxide
TSP	Total Suspended Particulate
tpy	tons per consecutive 12-month period
ULSD	Ultra Low Sulfur Diesel
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
WC	Inches water column

I. Facility Description

NHDES conducted a Full Compliance Evaluation of the Sprague Operating Resources (Sprague) facility located at 194 Shattuck Road in Newington, New Hampshire and conducted an onsite inspection, on September 1, 2016, as part of the evaluation. This facility has been historically referred to as the Avery Terminal. The purpose of the inspection was discussed as well as the rules pertaining to claims of confidentiality and facility safety concerns. Sprague agreed to the inspection and authorized access to the facility. No material provided during the inspection was stated to be confidential.

Sprague owns and operates the Avery Lane Terminal located at 194 Shattuck Way in Newington, New Hampshire. Sprague has operated this facility since November 1996 and currently stores and distributes 100-octane aviation gasoline, asphalt and #2 fuel oil. Aviation gasoline is stored in Tank #6 and is the permitted device associated with this inspection.

Aviation gasoline is received via rail car, unloaded into Tank #6 and then transferred to tank trucks via the aviation gasoline loading rack for hauling to commercial locations. The loading rack is equipped with a capture system and a vapor incinerator for capture and destruction of gasoline vapors being displaced from the trucks during truck loading.

The terminal also receives asphalt via ship or barge. The asphalt is stored in twelve dedicated, aboveground, fixed roof tanks. Asphalt is distributed via a loading rack separate from the aviation gasoline truck loading area. The asphalt truck loading area is equipped with an active vent system connected to a mist eliminator to prevent asphalt mists from causing odors.

Aboveground storage tanks used for the storage of #2 fuel oil and asphalt are below the permitting threshold of Env-A 607.01(h); specifically, the vapor pressure of the liquid being stored is less than 1.52 pounds per square inch absolute (psia) at 60°F. Therefore, these tanks are not required to be permitted. The asphalt storage tanks are heated with a heated oil (Dowtherm) system in order to maintain the asphalt in a flowable state. The Dowtherm utilizes two process heaters (9.9 MMBtu/hr each) that fire natural gas as the primary fuel with #2 fuel oil as the back-up. Both devices are below the permitting threshold of 10 MMBtu/hour heat input.

Sprague is a privately-owned company employing six people at the Avery Lane Terminal. The terminal operates on a 23 acre parcel of property. In 1996, Sprague purchased the terminal from Fuel Storage Corporation. The terminal currently operates 24-hours per day, seven days per week.

Facility Name and Address	Sprague Operating Resources, LLC 194 Shattuck Way Newington, NH 03801
County	Rockingham
Telephone	603-430-5131
AFS#	3301500041
Source Type	Synthetic Minor
Inspection Date / Time	September 1, 2016 / 11:00

Inspection Type	On-Site Full Compliance Evaluation
Inspection Period	2011 – September 1, 2016
Weather	Sunny, 75 degrees, calm winds
Inspected by	Edward Peduto, Senior Compliance Assessment Engineer Ray Walters, Compliance Measurement and Data Program Manager Margaret King, Air Pollution Control Engineer
Source Contact(s)	Buck Elliott, Seacoast Terminals Operations Manager Steve Halloran, Assistant Terminal Operations Manager Jason Littlefield, Environmental Manager
Last Inspection	July 29, 2011
Last Inspection Results: <ul style="list-style-type: none"> • Sprague had not reported to DES the annual emissions from the fire pump engine for 2008, 2009, and 2010. • Sprague had not paid emission-based fees on the emissions from the fire pump engine for 2008, 2009, and 2010. <p>The reports were amended and the fees paid. No further action was necessary.</p>	

The table below lists the permitting timeline and the effective periods of each permit / application covering the evaluation period. Sprague's permit expired April 30, 2015 and is currently in the renewal process. Since the application for the renewal was received by NHDES more than 90 days prior to the expiration of the permit, the application shield applies. The GSP that also expired August 30, 2015 has been included in the renewal application and will be combined with the renewal permit. Application shield applies to the GSP as well.

Permitting / Application Timeline			
Application	14-0469	Submitted (timely)	November 25, 2014
Permit	SP-0095	Issued	April 12, 2010
		Expired	April 30, 2015
Permit	GSP-EG-0356	Issued	August 19, 2011
		Expired	August 30, 2015
Application	09-0246	Submitted (timely)	October 2, 2009

II. Emission Unit Identification

Table 1 lists the permitted emissions units for the facility from State Operating Permit SP-0082.

Table 1 - Emission Unit Identification			
Emission Unit ID	Process Identification	Installation Date	Maximum Design Capacity
EU07	Aviation gasoline truck loading operations	2004	600 gallons/minute
EU10	Aviation gasoline storage tank #6	2008	181,230 gallons

The table below identifies the emergency fire pump covered under GSP-EG-0356. This device falls into the category of emergency engines that is designated as EU07 in the general permit. Engines meeting the specifications of EU07 are not subject to any federal NSPS or NESHAPs based on the manufacturing and installation dates. Therefore, this emergency engine is only subject to NHDES requirements for emergency engines which specifies that the fuel combusted must have less than 0.4% sulfur content and cannot be operated for more than 500 hours per 12 month period.

Table 1 (Contd.) GSP-EG-0365 - Emission Unit Identification							
Emission Unit ID	Device	Make and Model	Year Installed	Fuels	Max. Heat Input Rate (MMBtu/hr)	Max. Fuel Use Rate (gal/hr)	Output Rating
GSP EU07	Fire Pump Engine	John Deere 6068HF275 Ser # PE6068H537709	September 2006	diesel	1.74	12.7	251 hp

NHDES observed the devices identified in Table 1 and Sprague reported that no changes to these devices were made after installation that required a permit modification.

The table below lists the emissions from the permitted devices for the review period. Reported emissions were calculated using the NHDES recommended emissions factors for the period 2011 through 2015.

Year	Nitrogen Oxides (tpy)	Sulfur Dioxide (tpy)	Carbon Monoxide (tpy)	Particulate Matter (PM) (tpy)	NMVOCs (tpy)	Total Emissions (tpy)
Limits	---	---	---	---	--	N/A
2015	0.01	0.00	0.00	0.00	0.63	0.64
2014	0.01	0.00	0.00	0.00	0.71	0.72
2013	0.00	0.00	0.00	0.00	0.69	0.69
2012	0.01	0.00	0.00	0.00	0.69	0.70
2011	0.10	0.01	0.03	0.01	0.73	0.87

The factors and approach used for the evaluation period are consistent with the approach used in the permit application, the permits issued and the approved emission factors for 2015.

III. Pollution Control Equipment Identification

Air pollution control equipment listed in Table 2, taken from SP-0095 shall be operated at all times that the associated devices are operating in order to meet permit conditions.

Table 2 - Pollution Control Equipment Identification			
Pollution Control Equipment ID	Description	Purpose	Emission Unit Controlled
PCE01	Vapor Incinerator	Control of VOCs	EU07

IV. Compliance with Operating and Emission Limits

Table 3, below taken from permit SP-0095 lists the Operating and Emission Limitations for the facility and any deficiencies noted during the evaluation.

Table 3 - Operating and Emission Limitations				
Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
1	<p><u>New Source Performance Standards for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984</u></p> <p>Sprague shall equip Storage Tank #6 with a fixed roof and an internal floating roof. The storage tank shall be operated in the following manner:</p> <p>(a) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.</p> <p>(b) The internal floating roof for Storage Tank #6 shall have a mechanical shoe seal, which is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.</p> <p>(c) Each opening in a non-contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.</p> <p>(d) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells and stub drains</p>	EU10	40 CFR 60.112b (NSPS subpart Kb) & Env-A 1204.38(d)	Yes

Table 3 - Operating and Emission Limitations				
Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
	<p>is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.</p> <p>(e) The automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.</p> <p>(f) The rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.</p> <p>(g) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.</p> <p>(h) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.</p> <p>(i) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.</p>			
2	<p><u>New Source Performance Standards for Bulk Gasoline Terminals: Standard for Volatile Organic Compound Emissions from Bulk Gasoline Terminals</u></p> <p>Sprague shall equip the loading racks at the bulk gasoline terminal where aviation gasoline is delivered to tank trucks with a vapor collection system designed to collect the total organic compound (TOC) vapors displaced from tank trucks during product loading. Sprague shall comply with the following requirements for the bulk gasoline terminal:</p> <p>(a) The emissions to the atmosphere from the vapor collection system due to the</p>	EU07	40 CFR 60.502 (NSPS subpart XX) & Env-A 1204.40	Yes

Table 3 - Operating and Emission Limitations				
Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
	<p>loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded.</p> <p>(b) Each vapor collection system shall be designed to prevent any total organic compound vapors collected at one loading rack from passing to another loading rack.</p> <p>(c) Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:</p> <p>(1) Sprague shall obtain the vapor tightness documentation described in 40 CFR 60.505(b) for each gasoline tank truck that is to be loaded at the affected facility.</p> <p>(2) Sprague shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the terminal.</p> <p>(3) Sprague shall cross-check each tank identification number obtained in (c)(2) above with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:</p> <p>A) If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or</p> <p>B) If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semi-annually.</p> <p>If either the quarterly or semiannual cross-check reveals that these conditions were not maintained, the facility must return to bi-weekly</p>			

Table 3 - Operating and Emission Limitations				
Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
	<p>monitoring until such time as these conditions are again met.</p> <p>(4) Sprague shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the terminal within 1 week of the documentation cross-check.</p> <p>(5) Sprague shall take steps assuring that the non-vapor-tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that truck is obtained.</p> <p>(6) Alternate procedures to those listed above in (c)(1) through (5) for limiting gasoline tank truck loadings may be used upon application to and approval by EPA and notification of alternative procedures to DES.</p> <p>(d) Sprague shall act to assure that loadings of gasoline tank trucks at the facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.</p> <p>(e) Sprague shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of gasoline tank truck at the terminal (e.g., training drivers of hookup procedures and posting visible reminder signs).</p> <p>(f) The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level shall not be exceeded when measured according to the procedures specified in 40 CFR 60.503(d).</p> <p>(g) No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water).</p>			

Table 3 - Operating and Emission Limitations				
Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
3	<u>Applicability Criteria and Compliance Standards for Bulk Gasoline Loading Terminals</u> (a) Sprague shall equip the bulk gasoline loading terminal with a vapor control system, consisting of a vapor collection system which directs all vapors to a fuel gas system and destroys at least 90 percent by weight of all vapors and gases from the devices being controlled. (b) Sprague shall not allow gasoline to be discarded in sewers or stored in open containers or handled in any manner that would result in evaporation. Any spill buckets used to capture gasoline liquid product shall be covered and sealed at all times when not in use. (c) Loading of outgoing gasoline tank trucks shall be restricted to the use of submerged fill.	EU07	Env-A 1204.40(b)(3) Env-A 1204.40(b)(5) Env-A 1204.40(b)(14)	Yes
4	<u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u> The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period.	PCE1	Env-A 2002.02	Yes
Findings: The device was not operating at the time of the inspection and opacity could not be determined at that time. At the time the permit was issued, NHDES had sufficient information to indicate that under normal operating conditions, this device is capable of meeting the opacity limit.				
5	Sprague shall limit the auxiliary fuel for the vapor incinerator to propane or natural gas.	PCE1	Env-A 604.01	Yes
Findings: Sprague only uses propane as the auxiliary fuel source. Therefore, the facility is in compliance with this requirement.				
6	<u>Annual Throughput Limitation</u> The maximum throughput of aviation gasoline through the terminal shall be limited to 2,100,000 gallons during any consecutive 12-month period.	EU07	Env-A 604.02(a)(1) & Env-A 607.01(n)	Yes
7	<u>Maximum Sulfur Content Allowable in Liquid Fuels</u> The sulfur content of aviation gasoline shall not exceed 0.05% by weight.	EU07 & EU10	Env-A 1604.01(d)	Yes

Table 3 - Operating and Emission Limitations				
Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
Findings: Aviation gasoline is received via rail tank cars. Each tank car is sampled prior to unloading and the sulfur content of each tank car determined. Once determined, the contents of the rail cars are transferred to tank #6 for subsequent distribution. The sulfur content for aviation gasoline is typically 0.001%.				

Table 1, below taken from permit GSP-EG-0356 lists the required (applicable) emissions and operating requirements for the facility and any deficiencies noted during the evaluation. Please note that conditions from the general permit that do not apply have been deleted.

Table 1 - Operating and Emission Limitations			
Item #	Requirement	Regulatory Basis	Compliant
1	<u>Facility-Wide Emission Limitations</u> a. Facility-wide emissions of SO ₂ , PM ₁₀ , and CO shall be limited to less than 100 tpy; b. Facility-wide emissions of NO _x and VOCs shall be limited to less than 50 tpy.	Env-A 604.02(a)(1), and Env-A 1211.01(n)	Yes
2	<u>Emergency Generators</u> Each EG shall be limited to 500 hours of total operation during any consecutive 12-month period.	Env-A 1211.01(j)(1)	Yes
4	<u>Fuel Usage Limitations</u> Total fuel consumption during any consecutive 12-month period for each EG covered by this GSP shall not exceed a quantity of fuel that would result in an exceedance of any condition specified in this GSP.	Env-A 604.02(a)(2)	Yes
6	<u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u> The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period.	Env-A 2002.02	Yes
Findings: The emergency fire pump was not operating at the time of the inspection and as a result, opacity could not be determined. At the time the permit was issued, NHDES had sufficient information to indicate that under normal operating conditions, this device is capable of meeting the opacity limit.			
7	<u>Activities Exempt from Visible Emission Standards</u> The average opacity shall be allowed to be in excess of the standards specified in Table 1, Items 5 and 6, for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.	Env-A 2002.04(c)	Yes
10	<u>Particulate Emission Standards for Fuel Burning Devices Installed on or After January 1, 1985</u> The particulate matter emissions from fuel burning devices installed on or after January 1, 1985 shall not exceed 0.30 lb/MMBtu.	Env-A 2002.08	Yes

Table 1 - Operating and Emission Limitations			
Item #	Requirement	Regulatory Basis	Compliant
<i>Findings: Compliance with the particulate limit can only be determined through stack testing and none has been required to date. At the time the permit was issued, NHDES had sufficient information to indicate that under normal operating conditions, this device is capable of meeting the particulate limit.</i>			
11	<u>Maximum Sulfur Content Allowable in Liquid Fuels</u> a. The sulfur content of No. 2 oil shall not exceed 0.40 percent sulfur by weight; and b. The sulfur content of kerosene-1 oil shall not exceed 0.04 percent sulfur by weight.	Env-A 1604.01(a) Env-A 1604.01(e)	Yes
<i>Findings: Sprague only used ULSD as the fuel during the evaluation period. Therefore, Sprague is in compliance with this requirement.</i>			

V. Compliance with Monitoring and Testing Requirements

Table 4, below taken from permit SP-0095 lists the required monitoring and testing requirements for the facility and any deficiencies noted during the evaluation.

Table 4 - Monitoring and Testing Requirements						
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis	Compliant
1	To Be Determined	When conditions warrant, the Division may require the Owner or Operator to conduct stack testing in accordance with USEPA or other Division approved methods.	Upon request by the Division	Facility Wide	RSA 125-C:6 XI	Not Applicable
<i>Findings: No tests were required during the evaluation period.</i>						
2	Visual inspection of the internal floating roof and the primary seal or secondary seal (if one is in service)	The Owner or Operator shall visually inspect the internal floating roof and the primary seal or the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the Owner or Operator shall repair the items or empty and remove the	Once every 12 months	EU10	40 CFR 60.113b(a)(2) & Env-A 1204.38(d)(6)a	Yes

Table 4 - Monitoring and Testing Requirements						
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis	Compliant
		storage vessel from service within 45 days. If a failure that is detected during an inspection cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required by Item #3 of Table 6. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.				
Findings: Sprague conducts visual inspections monthly and documents any required issues. Maintenance is then conducted and documented.						
3	Visual inspection of the internal floating roof and the primary seal or secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any)	The Owner or Operator shall visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the Owner or Operator shall repair the items as necessary so that none of these conditions exist before refilling the storage vessel with VOL.	Each time the storage vessel is emptied and degassed and at least once every 10 years	EU10	40 CFR 60.113b(a)(4) & Env-A 1204.38(d)(6)b	Yes

Table 4 - Monitoring and Testing Requirements						
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis	Compliant
Findings: Sprague made the required notifications to NHDES and Allentech conducted the inspection and maintenance activities December 23, 2013. Minor repairs were made to the aluminum internal floating roof. The facility conducts these inspections every five years and the next inspection is scheduled during the end of 2018.						
4	Visual inspection	<p>When performing a visual inspection of the internal floating roof and its closure seal(s) as required by Items 2 & 3 above, the Owner or Operator shall inspect for all of the following:</p> <ul style="list-style-type: none"> (a) The cover shall be uniformly floating on or above the liquid; (b) The surface of the cover shall have no visible defects; (c) The cover shall have no accumulated liquid; and (d) The seal shall be intact and uniformly in place around the circumference of the cover between the cover and tank wall. 	N/A	EU10	Env-A 804.18	Yes
5	TOC liquid or vapor leaks	Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.	Monthly	EU07 & PCE1	40 CFR 60.502(j)	Yes

Table 2, below taken from permit GSP-EG-0356 lists the required monitoring and testing requirements for the facility and any deficiencies noted during the evaluation.

Table 2 - Monitoring and Testing Requirements					
Item #	Parameter	Method of Compliance	Frequency	Regulatory Basis	Compliant
1	To Be Determined	When conditions warrant, the Division may require the Owner or Operator to conduct stack testing in accordance with USEPA or other Division approved methods.	Upon request by the Division	RSA 125-C:6 XI	Not Applicable
Findings: No Testing has been required during the evaluation period.					
2	Sulfur Content of Liquid Fuels	Conduct testing in accordance with appropriate ASTM test methods or retain delivery tickets in accordance with Table 3, Item 3 in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels.	For each delivery of fuel oil/diesel to the Facility	Env-A 806.02 & Env-A 806.05	Yes
Findings: The fuel used at the Avery Lane Terminal is delivered from the inventory maintained at the River Road Facility. Sprague analyzes each shipment for sulfur content and provides certification to the Avery Lane Facility.					

VI. Compliance with Recordkeeping Requirements

Table 5, below taken from permit SP-0095 lists the required recordkeeping for the facility and any deficiencies noted during the evaluation.

Table 5 - Recordkeeping Requirements					
Item #	Requirement	Duration/Frequency	Applicable Unit	Regulatory Basis	Compliant
1	<u>Record Retention and Availability</u> Keep the required records on file. These records shall be available for review by the Division upon request.	Retain for a minimum of 5 years	Facility Wide	Env-A 902	Yes
2	The Owner or Operator shall keep a record of each inspection performed as required by Items 2 & 3 of Table 4. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).	Retain for a minimum of 2 years	EU10	40 CFR 60.115b(a)(2)	Yes

Table 5 - Recordkeeping Requirements					
Item #	Requirement	Duration/Frequency	Applicable Unit	Regulatory Basis	Compliant
3	The Owner or Operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.	Retain for the life of the storage tank	EU10	40 CFR 60.116b(a) & (b)	Yes
4	For each storage vessel, the Owner or Operator shall maintain a record of VOL stored, the period of storage and the maximum true vapor pressure of that VOL during the respective storage period. Available data on the storage temperature may be used to determine the maximum true vapor pressure as described in 40 CFR 60.116b(e).	Retain for a minimum of 2 years	EU10	40 CFR 60.116b(c) & (e)	Yes
5	<u>Additional Recordkeeping Requirements</u> Sprague shall record monthly throughput of aviation gasoline and also calculate the throughput during any consecutive 12-month period.	Monthly	EU07	Env-A 906	Yes
6	<u>Fuel Analysis Requirements</u> For aviation gasoline, Sprague shall maintain one of the following records: (a) A written statement of the maximum weight percentage sulfur of the fuel; or (b) A written statement that the sulfur content of the aviation gasoline as delivered does not exceed state or federal standards.	Maintain Current Data	EU10	Env-A 1607.01 & Env-A 903.05	Yes
7	The tank truck vapor tightness documentation required under Item #2(c)(1) of Table 3 shall be kept on file at the terminal in a permanent form available for inspection.	On a continuous basis	EU07	40 CFR 60.505(a)	Yes

Table 5 - Recordkeeping Requirements

Item #	Requirement	Duration/Frequency	Applicable Unit	Regulatory Basis	Compliant
8	<p>The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include, as a minimum, the following information:</p> <ul style="list-style-type: none"> (a) Test title: Gasoline Delivery Tank Pressure Test-EPA Reference Method 27; (b) Tank owner and address; (c) Tank identification number; (d) Testing location; (e) Date of test; (f) Tester name and signature; (g) Witnessing inspector, if any: Name, signature, and affiliation; and (h) Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs). 	On a continuous basis	EU07	40 CFR 60.505(b)	Yes
9	<p>A record of each monthly leak inspection required under Item #5 of Table 4 shall be kept on file at the terminal for at least 2 years. Inspection records shall include, as a minimum, the following information:</p> <ul style="list-style-type: none"> (a) Date of inspection; (b) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak); (c) Leak determination method; (d) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days); and (e) Inspector name and signature. 	Retain for 2 years	EU07	40 CFR 60.505(c)	Yes
10	The terminal owner or operator shall keep documentation of all notifications required under Item #2(c)(4) of Table 3 on file at the terminal for at least 2 years.	Retain for 2 years	EU07	40 CFR 60.505(d)	Yes
11	As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in Items 7, 9 & 10 above, the Owner or Operator may comply with the requirements in either paragraph (a) or (b) of	On a continuous basis for Item 7; 2 years for	EU07	40 CFR 60.505(e)	Yes

Table 5 - Recordkeeping Requirements					
Item #	Requirement	Duration/ Frequency	Applicable Unit	Regulatory Basis	Compliant
	<p>this item:</p> <p>(a) An electronic copy of each record is instantly available at the terminal.</p> <ol style="list-style-type: none"> The copy of each record in paragraph (a) of this section is an exact duplicate image of the original paper record with certifying signatures. The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (a) of this section. <p>(b) For facilities that utilize a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (e.g., via a card lock-out system), a copy of the documentation is made available (e.g., via facsimile) for inspection by permitting authority representatives during the course of a site visit, or within a mutually agreeable time frame.</p> <ol style="list-style-type: none"> The copy of each record in paragraph (b) of this section is an exact duplicate image of the original paper record with certifying signatures. The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (b) of this section. 	Items 9 & 10			
12	The Owner or Operator of an affected facility shall keep records of all replacements or additions of components performed on an existing vapor processing system for at least 3 years.	Retain for 3 years	PCE1	40 CFR 60.505(f)	Yes

Table 3, below taken from permit GSP-EG-0356 lists the required recordkeeping for the facility and any deficiencies noted during the evaluation.

Table 3 - Recordkeeping Requirements				
Item #	Requirement	Duration/Frequency	Regulatory Basis	Compliant
1	<u>Record Retention and Availability</u> Keep the required records on file. These records shall be available for review by the Division upon request.	Retain for a minimum of 5 years	Env-A 902	Yes
2	<u>General Recordkeeping Requirements for Combustion Devices</u> Maintain the following records: a. Type (e.g. diesel fuel, natural gas) and amount of fuel burned; and b. Hours of operation for each emergency generator.	Monthly	Env-A 903.03	Yes
3	<u>Liquid Fuel Oil Recordkeeping Requirements</u> In lieu of sulfur testing pursuant to Table 2, Item 2, the Owner or Operator may maintain a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed state or federal standards for that fuel.	Whenever there is a change in fuel supplier, but at least annually	Env-A 806.05	Yes
5	<u>General NO_x Recordkeeping Requirements</u> If the actual annual NO _x emissions from the Facility are greater than or equal to 10 tpy, then record the following information: a. Identification of each fuel burning device; b. Operating schedule during the high ozone season (June 1 through August 31) for each fuel burning device identified in Table 3, Item 5.a, above, including: 1. Typical hours of operation per day; 2. Typical days of operation per calendar month; 3. Number of weeks of operation; 4. Type and amount of each fuel burned; 5. Heat input rate in MMBtu/hr; 6. Actual NO _x emissions for the calendar year and a typical high ozone day during that calendar year; and 7. Emission factors and the origin of the emission factors used to calculate the NO _x emissions.	Maintain Current Data	Env-A 905.02	Yes

VII. Compliance with Reporting Requirements

Table 6, below taken from permit SP-0095 lists the reporting requirements for the facility and any deficiencies noted during the evaluation.

Table 6 - Reporting Requirements					
Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
1	<u>Annual Emissions Report</u> Submit an annual emissions report which shall include the following information: (a) Actual calendar year emissions from each emission unit of VOCs (speciated by individual VOC) and HAPs (speciated by individual HAP); (b) The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i> ; and (c) Annual throughput of aviation gasoline.	Annually (received by DES no later than April 15th of the following year)	EU07 & EU10	Env-A 907.01	Yes
2	<u>Storage Vessel Repair Notification</u> If any conditions requiring repair are detected during the annual visual inspection required by Item #2 of Table 4, Sprague shall furnish a report to EPA and DES within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects and the date the storage vessel was emptied or the nature of and date the repair was made.	Within 30 days after an inspection where defects were found	EU10	40 CFR 60.115b(a)(3)	Yes
Findings: Sprague filed a notification dated December 2, 2013 that the tank would be open for the period December 19-26, 2013. No defects were found based on the inspection report. Minor maintenance items were conducted during the outage.					
3	<u>Notification of filling or refilling after the storage vessel is emptied and degassed</u> The Owner or Operator shall notify DES and EPA in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by Item 2 of Table 4 to afford DES and/or EPA the opportunity to have an observer present. If the inspection required by Item #2 of Table 4 is not planned and the Owner or Operator could not have known about the inspection 30 days in advance or refilling the tank, the Owner or Operator shall notify DES and EPA at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why	N/A	EU10	40 CFR 60.113b (a)(5)	Yes

Table 6 - Reporting Requirements					
Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
	the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by DES and EPA at least 7 days prior to the refilling.				
4	<u>Permit Deviation Reporting Requirements</u> Report permit deviations that cause excess emissions in accordance with Condition VIII.B.	Within 24 hours of discovery of excess emission	EU07 & EU10	Env-A 911.04(b)(1)	Yes
5	<u>Emission Based Fees</u> Pay emission-based fees in accordance with Condition X.	Annually (received by DES no later than April 15 th of the following year)	EU07 & EU10	Env-A 700	Yes

Table 4, below taken from permit GSP-EG-0356 lists the applicable reporting requirements for the facility and any deficiencies noted during the evaluation.

Table 4 - Reporting Requirements				
Item #	Requirement	Frequency	Regulatory Basis	Compliant
1	<u>Annual Emissions Report</u> Submit an annual emissions report which shall include the following information: a. Actual calendar year emissions from each device of NO _x , CO, SO ₂ , TSP, VOCs, and HAPs; b. The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i> ; and c. All information recorded in accordance with Table 3, Items 2, 3 and 4.	Annually (no later than April 15th of the following year)	Env-A 907.01	Yes
2	<u>NO_x Emission Statements Reporting Requirements</u> If the actual annual NO _x emissions for the Facility are greater than or equal to 10 tpy, then include the following information with the annual emission report: a. A breakdown of NO _x emissions reported pursuant to Table 4, Item 1 by month; and b. All data recorded in accordance with Table 3, Item 5.	Annually (no later than April 15th of the following year)	Env-A 909	Not Applicable

Table 4 - Reporting Requirements				
Item #	Requirement	Frequency	Regulatory Basis	Compliant
<i>Findings: The NOx emissions for the evaluation period were less than 10 tpy. Therefore, this condition does not apply.</i>				
3	<u>Permit Deviation Reporting Requirements</u> Report permit deviations that cause excess emissions in accordance with Condition VI.B.	Within 24 hours of discovery of excess emission	Env-A 911.04(b)	Yes
4	<u>Emission Based Fees</u> Pay emission-based fees in accordance with Condition VII.	Annually (no later than April 15th of the following year)	Env-A 700	Yes

VIII. Permit Deviations

Sprague is aware of the requirements to track and report deviations. No deviations were reported during the evaluation period and no deficiencies were found during the evaluation.

IX. Other Findings

Truck Loading Operations – Sprague has a very detailed loading procedure for loading the aviation gasoline which first checks to ensure that the truck requesting entry to the facility has current vapor tightness certification paperwork on file. The entry information is kept electronically on the Sprague Terminal data management system and the system will not allow truck entry unless the proper clearance information is present and an order for the amount of product to be dispensed has been received.

Once the truck is cleared to enter the loading area, Sprague loading personnel conduct what is referred to as a “White Bucket Test.” The test involves opening the bottom port on a tanker truck and draining a sample of any residual into the bucket to ensure that the product being dispensed will not be contaminated by residual material from the last load the tanker hauled. For instance, if the residual is red, this would indicate that the last load hauled was either heating oil or off road diesel distillate. If this were the case, Sprague would not allow loading of the aviation gas.

Pending satisfactory completion of the white bucket test, the tanker is loaded from the bottom of the tanker truck to fulfill the requirement to transfer the product under submerged conditions. Once the truck is grounded, the hose connected and all connections checked, the dispensing operation is initiated. At the time dispensing is initiated, the vapor recovery fume incinerator is started to capture and destroy gasoline vapors released during the filling sequence. The fume incinerator system is interlocked with the dispensing equipment and automatically starts when the dispenser pump starts.

Tank Inventory – Sprague has a total of seventeen above ground tanks that are used for the bulk storage of asphalt, #2 fuel oil, and aviation gasoline. Each of the twelve asphalt tanks are heated to 300 degrees F using hot oil produced by two process heaters that are below permitting thresholds. Two of the tanks are used to store #2 fuel oil for the process heaters and building heating units. One other tank is used to store asphalt additive. Attachment 1 provides a full listing of all tanks currently on site and the use of each.

Facility Wide RTAP Evaluation – Sprague conducted periodic reviews of Env-A 1400 and incorporated changes occurring during the evaluation period to the facility review. The last review was conducted July 2, 2014 and addressed any changes resulting from the April 4, 2014 revision of Env-A 1400. Sprague concluded that the facility complied with Env-a 1400 for the evaluation period.

Facility Wide VOC Emissions – Sprague maintains a facility wide VOC emissions inventory for all activities conducted at the Avery Lane facility. The calculations provided indicate that the Avery Lane facility on a "Potential to Emit" basis continues to be below the major facility threshold of 50 tpy.

Hot Oil Heaters – Sprague operates two hot oil (Dowtherm) process heaters to heat asphalt to an approximate temperature of 300 degrees F. The units are rated at 9.9 MMBtu / hour heat input each and can fire natural gas or #2 fuel oil. At the time of the inspection, both units were firing natural gas and no opacity was noted from either stack.

Non-Permitted Hot Oil Heater Data		
	Heater #1	Heater #2
Manufacturer	Geka Thermal Systems	Geka Thermal Systems
Model #	JW-12-2	JW-1272
Serial #	JWB 0693	JWB 0893
Rating	9.9 MMBtu/hr	9.9 MMBtu/hr
Fuel Capabilities	#2 Fuel oil or Natural gas	#2 Fuel oil or Natural gas
Fuel During Inspection	Natural Gas	Natural Gas
Maximum Design Fuel Flow Rate	Not available.	Not available.
Status	In operation during this inspection.	In operation during this inspection.
Opacity	No Opacity Noted.	No Opacity Noted.
Installation Date	1993	1993

Infrared Video – NHDES conducted video recordings of the asphalt and aviation gasoline storage tank vents using an infrared imaging camera. The purpose was to detect gas emissions from the tank vents. No vent emissions were detected from the video recordings.

X. Enforcement History and Status

There was not any enforcement actions issued during the evaluation period by NHDES or EPA.

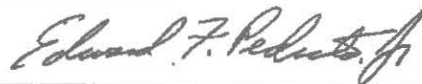
XI. Compliance Assistance, Recommendations and Corrective Actions

NHDES found no deficiencies during the compliance evaluation.

Report Prepared By: Edward F. Peduto, Jr.

Title: Senior Compliance Assessment Engineer

Signed:



ATTACHMENT 1

LISTING OF ABOVE GROUND TANKS

